

What was discovered by O'Dell is not "idea" of O'Dell, and corresponds to "laws of nature (or natural phenomenon)", (except part of the classification scheme of FIG. 1A of O'Dell.)

O'Dell, then utilized the discovery, in such way as "grouping the possible strokes into seven groups", classified by the classification scheme of FIG. 1A, as stated in O'Dell, col. 8, line 24+ ", and as mentioned in O'Dell Claim 1(mentioning part of it below);

means for storing a plurality of strings of code numbers / shapes of the characters;

means for enabling an operator to enter code numbers;

controlling means for comparing the string of code numbers entered by the operator as they are entered to the strings in the first storing means and for causing the display means to display the shape of a character from the second storing means when the code numbers entered by the entering means uniquely identify said character.

Fig. 5 in O'Dell, can not suddenly appear. Prior to reaching at Fig. 5, a certain number of strokes must be made by the user, and users would have to face chaotic situations during the process, having (matched) different Japanese characters unknown to the user, which may suddenly and unexpectedly appear on the display, at the time of input.

\*(Examples)\*

After typing codes upto 丨 ㄣ 一 , 口 appears on the display.

< Then, operator's action is necessary to further continue >

After typing codes upto 丨 ㄣ 一 丨 , 中 appears on the display.

< Then, operator's action is necessary to further continue >

After typing codes upto 丨 ㄣ 一 丨 一 , 叫 appears on the display.

< Then, operator's action is necessary to further continue >

Applicant also understands that "laws of nature" mean such things as "a water moves high to low", "a log floats on a water", etc, and also "laws of nature" mean not only what is mentioned above, but also everything which may result in the definite result by the definite cause, having been empirically detected.

Applicant of the present invention, found while reading the contents of English dictionary, that each word may be unique in the English dictionary, prior to reaching at the end of the character of word, ie "law of nature in the natural language", and realized that it must be good for the text input application.

The present invention is based on the applicant's discovery made in reading the contents of English dictionary, and applicant intended to utilize it to form a practical and efficient way of text input to reduce the burden of operator, as mentioned in the Claims of present invention, shown below.

[ Claims in the present invention are based on applicant's ideas utilizing the above-mentioned discovery. ]

Claim 104 is to find, eg "shipment" by entering "m" or "t" of "shipment", after identifying such words as eg "shipment", "shipping", "shipped", etc, after entering "ship".

means for identifying plural lines of text with the same first part including entered line of text, and determining a unique line of text with the same last character as the last entered one,,, and,

means for identifying plural lines of text with the same first part including entered line of text, and determining a unique line of text including the same one as the last entered characters in the remaining part of line of text other than that was successfully collated with entered line of text.

Claim 105 is to be able to find, by force, eg "impartial" at 5th position after entering upto "impar", at having such candidate words as "impart, impartable, impartation, impartment, impartial, impartial, impartially, impartiality, impartible, impartibly, impartibility", etc, by;

means for storing a plurality of lines of text, original words and a unique position count for said line of text in a dictionary;

means for determining a unique line of text in said dictionary which includes said entered line of text, and which has said unique position count same as the number of last collated character position of said line of text in said dictionary collated with said entered line of text.

Claim 106 is to find, eg "stemming" by entering "g", after identifying such words as "stemless", "stemlike", "stemmed", "stemmer", "stemming", etc, as based on "stem".

means for identifying plural lines of text with the same stem of word which includes entered line of text, and determining a unique line of text which has the same last character as the last entered character;

means for identifying plural lines of text with the same stem of word which includes entered line of text, and determining a unique line of text which includes the same one as the last entered characters in the remaining part of line of text.

"Stem" in this case is different from "root" ( eg 足 of 踏 ) mentioned in O'Dell. One of "stem" examples in English is "Search" for "Search, Searching, Searches", etc.

Claim 107 is to find, (after determining what is unique line of text which includes entered line of text stored with relevant words), eg "airway" by entering "y", after determining "air" in the dictionary stored with such relevant words as "air bag", "aircondition", air conditioning", "airline", "airmail", "airplane", "airway", etc, by;

means for storing a plurality of lines of text and relevant words for said line of text in a dictionary;

means for determining a unique line of text stored with plural number of said relevant words which includes said entered line of text, and selecting a unique word among said relevant words which includes said entered line of text in the remaining part of line of text;

Needless to say, each relevant word data do not have to be a single word, and may contain plural number of words, being separated by space, in the case of relevants words.

Claim 108 is to find, eg "immediately" by entering "imdl" etc by;

means for entering a line of text consisting of a first character followed by some other following characters, character by character;

means for determining a unique line of text which includes entered line of text;

Claim 109 is to find, eg "借" by entering " 𠂇𠂇 " utilizing "unique position count of 5 (eg, "being set for 借", in this case)", out of such Japanese candidates words as "供", "借", "僅", "備", "𠂇", etc, in the dictionary, by;

means for entering a line of text of handwriting strokes;

means for storing a plurality of lines of text of handwriting strokes, original word and a unique position count for line of text of handwriting strokes;

means for determining a unique line of text of handwriting strokes which includes entered line of text of handwriting strokes and which has unique position count same as the number of last collated stroke position of said line of text of handwriting strokes collated with entered line of text.

Claim 110 is to find, eg "備" by entering " 𠂇𠂇 ", etc, out of such Japanese words as "供", "借", "僅", "備", "𠂇", etc, in the dictionary, by;

means for identifying plural lines of text of handwriting strokes with the same first part which includes said entered line of text of handwriting strokes, and determining a unique line of text of handwriting strokes which has the same one as the last entered stroke, among said identified plural lines of text of handwriting strokes;

means for identifying plural lines of text of handwriting strokes with the same first part which includes said entered line of text of handwriting strokes, and determining said unique line of text of handwriting strokes which includes the same one as the last entered strokes in the remaining part of line of text of handwriting strokes other than that was successfully collated with entered line of text of handwriting strokes.

Claim 111 is to find, eg "𠂇" by entering " 𠂇 ", etc ( "𠂇" is different from "鳴"), out of such Japanese words as "𠂇", " 燕", "鳴", etc, in the dictionary, by;

means for entering a line of text of handwriting strokes consisting of a first stroke and some other following strokes;

means for determining a unique line of text of handwriting strokes which contains said entered first stroke and some other following strokes.

Claim 112 is to determine predetermined number of line of text data (candidate data), by;

means for determining unique line of text which comprises determining a predetermined number of lines of text, in said dictionary.

Examples mentioned above for Claims 104 to 112, are also applied to those of Claims 113 to 121, as well.

In addition, there are many parts stating about "root" in the specification of O'Dell. For example, O'Dell - col. 12, lines 23 to 24 states "Many Chinese characters and Japanese Kanji characters can be further broken down into "roots".", and also, col. 12, lines 32 to 35 states "Also illustrated in FIG. 10 is the display of such a partial character for the Japanese Kanji character "age". When entering this character, the operator starts at the upper left portion of the root 56 in the character.

Root 56 is 齒 and it is one of the radicals for Japanese Kanji characters, and is not the stem, as per attachment.

Radicals for Japanese Kanji characters may consist of strokes. Therefore, it should read "Many Japanese Kanji characters can be broken down into "radicals" and "strokes".

Examples of "Stem" in Japanese language are as follows.  
(Conjugation of a verb):

In case of 踏 shown in FIG. 1A of O'Dell, the stem is "fu" (踏) ,  
and " 足 of 踏 " is not "stem".

"fu" of fumanai(踏まない=in Japanese), "fu" of fumimasu(踏みます),  
"fu" of fumu(踏む), "fu" of fumutoki (踏むとき),  
"fu" of fumeba(踏めば), "fu" of fume(踏め).  
< "fumu" is " 踏む " in Japanese, and means "step" in English. >

Other example;

"ka" of kakanai(書かない=in Japanese), "ka" of kakimasu(書きます),  
"ka" of kaku(書く), "ka" of kakutoki(書くとき),

"ka" of kakeba(書けば), "ka" of kake(書け).

< "kaku" is "書く" in Japanese, and means "write" in English. >

"ㇿ" in O'Dell is neither stem/root, nor Japanese character, and it is one of radicals for Japanese Kanji characters, as per attachment.

Therefore, "Entering ,,,,,,, Identifying a plurality of lines of text with the same stem, and ,,,,,," (which is mentioned in the paragraph 7 of Office Action), is not contained in O'Dell, as "ㇿ of 距" is not stem. And also, "Fig. 5 shows the plurality of lines of words with the same initial stems, giving ,,,,,," (which is mentioned in the paragraph 7 of Office Action) is not contained in O'Dell, as "ㇿ of 距" in O'Dell is not initial stem.

Concerning the Paragraph 9 of the Office Action, U.S. Pat. No. 5870492 (Shimizu) is not related to the present invention, and also not related to O'Dell, as well.

Shimizu does nothing for "Japanese Kanji Stroke input".

As mentioned in the specifications, eg, col. 2 - lines 33 to 52, Claim4, etc, Shimizu relates to an improvement of handwriting character entry apparatus, by entering such Japanese Kana characters as "あい", and converting & showing such Japanese Kanji characters (candidates) as "愛、逢、哀、相、藍、etc" which may correspond to the above-mentioned "あい", for the selection by the operator.

As for the Paragraph 10 of the Office Action, applicant reiterates as follows, in addition to what was stated in applicant's response for the paragraph 7 of Office Action.

[ Claims in the present invention are based on applicant's ideas utilizing the discovery. Those are different from O'Dell. ]

Claims 104/113 are to find, eg "shipment" by entering "m" or "t"(t is the last character of "shipment") etc, after identifying such words as eg "shipment", "shipping", "shipped", "entering "ship".

Claims 105/114 are to be able to find, eg "impartial" at 5th position after

entering upto "impar" for such candidate words as "impart, impartable, impartation, impartment, impartial, impartially, impartiality, impartible, impartibly, impartibility".

Claims 106/115 are to find, eg "stemming" by entering "g", after identifying such words as "stemless", "stemlike", "stemmed", "stemmer" , "stemming", etc, as based on "stem".

Claims 107/116 are to find, (after determining what is unique line of text which includes entered line of text stored with relevant words), eg "airway" by entering "y", after determining "air" in the dictionary stored with those relevant words, eg "air bag", "aircondition", air conditioning, "airline", "airmail", "airplane", "airway".

Claims 108/117 are to find, eg "immediately" by entering "imdl".

Claims 109/118 are to find, eg "借" by entering " イ" " with the intention to utilize "unique position count of 5 in this case, out of such Japanese candidates words as "供", "借", "僅", "備", " ", etc, in the dictionary).

Claims 110/119 are to find, eg "備" by entering " ", etc, out of such Japanese words as "供", "借", "僅", "備", " ", etc, in the dictionary.

Claims 111/120 are to find, eg "鳴" by entering " 𠬞 ", etc " out of such Japanese words as " 𠬞 ", " 燕", "鳴", etc, in the dictionary.

Claims 112/121 are to determine predetermined number of unique line of text data, or unique line of text data with other candidate data.

Shimizu has nothing to do with "Strokes" of Japanese Kanji character, and is not related to the present invention.

For example, Shimizu is for inputting such Kana characters as "あい", and converting & showing such candidate Japanese Kanji characters as "愛、逢、哀、相、藍、etc" for the selection by the operator,

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It is respectfully requested that this patent application be reconsidered, claims 104-121 allowed, and the case passed to issue.

Very respectfully,

Applicant:



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Encl: Attachment for Japanese Kanji - radicals, etc (19 pages)